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B.R. Stein  
1988

China

Catalogue #1-111 (Accn. 12781)

Journal



B.R. Stein

1988

China

Catalogue #111 (Acad. 13781)

Journal



B.R. Stein  
1988

China  
Menglung, Yunnan Prov.

Catalogue #1-111 (Accn. 12781)







Stein, B.R.  
1988

accn. 12781

3 Aug.

ca. 2 km. from Menglung, Inst. of Ecology Field Sta.,  
Menglung, Yunnan, PRC

1. Y10600 *Eonycteris spelaea* *Rousettus* ♂ 110-10-18-20=50g forearm 65mm.  
calcar 6mm.  
alcoholic, tissues - BRS

ectoparasites - A.G. Cleveland, Texas Wesleyan

~~stomach/intestines - G. Hickling, New Zealand~~

2. Y10601 *Eonycteris spelaea* *Rousettus* ♂ 121-16-21-23=62g forearm 76mm  
calcar 7mm  
alc., tissues - BRS

ectos - A.G. Cleveland

3. Y10602 *Rattus nitidus* (?) ♂ 310-148-30-19=78gr.

ectos - G. Hickling, New Zealand

scrotal

Gut length - " " "

tissues, alc. - BRS

eyes - V. Choate

- # 2094204. SNAKE *Columba spinalis* SV 22.3 mm

Killed 3 Aug 88

tissues - minimal

coll. by Reservoir Dam, Huiron, Beijing Municipality

29 July 1988

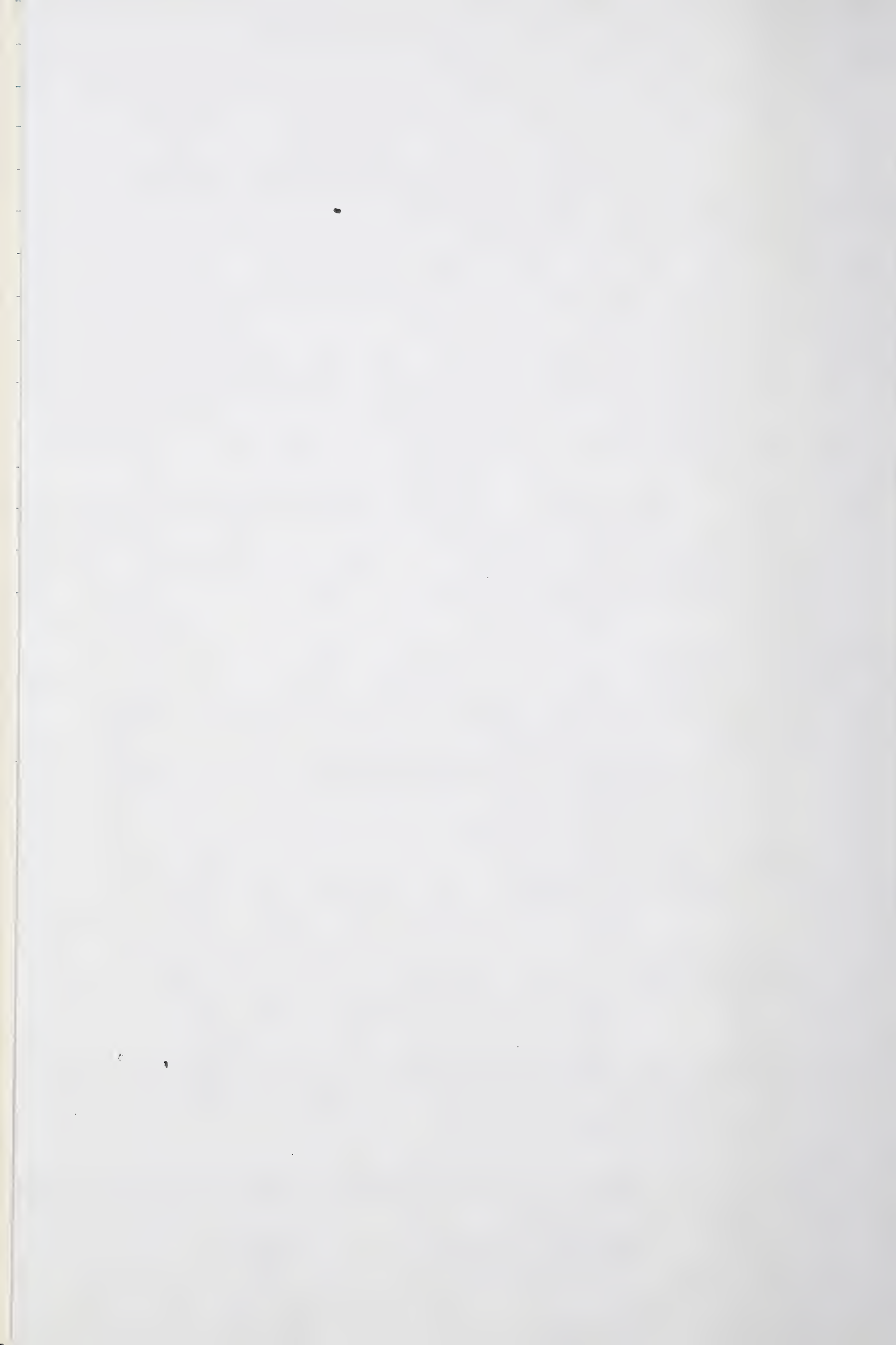
(50 km. NE Beijing)

ventral surface of tail scraped

5. Y10603 *Eonycteris spelaea* *Rousettus* ♂ 105-13-20-20=44g forearm 65mm  
calcar 6mm  
alc., tissues - BRS

ectos - J. Martin







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1988

Menglung Field Sta. - CONT.

- 3 Aug. 6. Y10604 *Rousettus* ♀ 102-18-21=37g. forearm 64 mm  
alc., tissues - BRS calcar 4 mm  
ectos - M. Cleveland
7. Y10605 *Rousettus* ♂ 110-17-16-18=35g. forearm 65 mm  
alc., tissues - BRS calcar 5 mm  
Ectos - J. Martin
8. Y10606 *Rousettus* ♀ 108-14-15-18=33 g. forearm 65 mm  
alc., tissues - BRS calcar 5 mm.  
Ectos - J. Martin DEAD IN BAG
9. Y10607 *Rousettus* ♂ 138-22-21-19=70g. forearm=75  
alc., tissues - BRS calcar = 6 mm  
Ectos - J. Martin DEAD IN BAG
10. Y10608 *Rousettus* ♀ 118-15-17-19=41g. forearm=65  
alc., tissues - BRS calcar = 6 mm.  
Ectos - J. Martin
11. Y10609 *Scotophilus heathii* ♂ 144-61-13-18=36 g.  
alc., tissues - BRS forearm = 60 mm + one vial blood  
Ectos - M. Cleveland
12. LIZARD *Hemidactylus* sp.  
took tissues - minimal  
on window ledge of Field Sta. bldg. - 8:00 pm.







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Rubber Trees, Tea, + Coffee Plant Cultivated "Forest" adjacent to  
small patch of 2<sup>o</sup> forest, Kunming Agric. Exper. Stat., Menglung, Yunnan

Aug. 13. TOAD coll. 4 Aug. Killed 5 Aug.

209425

tissues, alc. - BRS + blood

In laboratory at Kunming Experimental Stat., Menglung, Yunnan

#209423

4. small LIZARD *Hemidactylus* sp.

no tissues

In bedroom at Kunming Experimental Stat., Menglung, Yunnan

15. *Hipposideros bicolor* ♀ 73-27-6-22 = 6g. forearm .45

Y10610 - skin + skull - A.G. Cleveland

+ partial skel.

tissues - BRS H, L, Muscle

~~UNUSUAL REGION~~

Primary Forest Area #1, Km. 51-52 on road to Menglung,  
Yunnan Prov., PRC

16. SMALL TOAD *Microhyla* sp.

209426

no tissues

17. Y10611 *Dremomys rufigenus* ♀ 370-180-47-24 = 204g

tissues - BRS (2 vials)

skin + skull - A.G.C.  
+ partial skel.

gut length - G. Hickling

~~UNUSUAL REGION~~ eye lens - V. Choate

KILLED BY HUNTER

In bedroom at Kunming Experimental Sta., Menglung, Yunnan

209422

18. GECKO *Hemidactylus* sp.

no tissues

6 Aug. Near Bridge by Laboratory, Kunming Exper. Sta., Menglung, Yunnan

170527

19. *Rattus nitidus* (?) ♀ 307-159-32-18 = 85g.

tissues, alc - BRS (2 vials) 6 placental scars (5+1)

stomach - G. Hickling

nipples regressed.

Y10612 NO ECTOS

repro. organs - A.G.C.







tein, B.R.

Primary Forest Area #1, Kunming Exp. Sta., Menglung, Yunnan

6 Aug. 20. Y10613 <sup>Niviventer</sup> ~~Rattus~~ niviventer(?) ♀ 324-188-31-25 = 66 gr.

sharply bicolored tail

tail > HB by ~30%

spiny fur, buff belly

nipples - 2 pr. pectoral

2 pr. pelvic  
postlactating - no placenta

scars visible

→ - skeleton - body had started to decay

NO TISSUES

G. Hickling - guts

Primary Forest Area #2, Kunming Exp. Sta., Menglung, Yunnan

7 Aug. 21. Y10614 Cynopterus sphinx(?) ♀ 89-9-14-18 = 25 gr.

skin + skull - A.G.C.  
+ partial skel.

forearm 66 mm  
calcar 4.5 mm.

tissues. - B.R.S.

NO ECTOS (dead in bag) - prep. 8 Aug. '88

22. Y10615 Roussettus

♀ 103-110-15-17 = 45 gr.

ECTOS - J. Martin

forearm 69 mm  
calcar 5 mm

skin, skull, partial skel - A.G.C.

tissues - BRS

8 Aug 23. Y10616 Suncus murinus ♀ 163-79-15-10 = 16 gr.

skin + partial skel - A.G.C.

tissues - BRS

gut meas. - G. Hickling

NO ECTOS

24. Y10617 Rattus

♀ 340-165-32-20 = 125 gr.

skin + partial skel - A.G.C.

tissues - BRS

gut - G. Hickling

ECTOS

Wh. belly, tail black, dorsum headft. gray w/ wh. edges







Stein, B.R.  
1988

By Kitchen at Kunming Exp. Sta., Menglung, Yunnan

25. Y10618 *Rattus ruber flavipes* ♂ 334-182-32-24=142 gr.

alc., tissues - BRS

very scrotal

gut length - G. Hickling

NO ECTOS

26. Y10619 *Rattus ruber flavipes* ♀ 301-152-29-21=87 gr.

alc., tissues - BRS

nipples 3 inguinal pres., 2 pectoral

gut length - G. Hickling

perforate

NO ECTOS

~~ant. small extra~~

1° Forest area #1, Kunming Exp. Sta., Menglung, Yunnan

209424 27. small SKINK - no tissues *Tropidophorus*

9 Aug 28. Y10620 *Rhizomys pruinosus* ♂ 430-115-54-22-

Collected 4 Aug

MENG LUNG STATION

Ectos J. Martin

Tissues B. Stein (13)

Chromosomes V. Choate

Alcoholic B. Stein

Eyes <sup>took femur</sup> V. Choate

Endos AGC

Testes 20 mm

Bot from hunters

29 Y10621 *Rousettus leu*

♀ 105-10-14-23-40g

MENG LUNG STATION

forearm: 60 mm calcar: 7 mm

No Ectos SM

Eyes V. Choate

Skin & partial skel J. Martin

Tissues J. Martin

30. Y10622 *Rousettus leu*

♂ 116-12-21-19-52 g

MENG LUNG STATION

forearm 72 mm calcar 6 mm

No Ectos SM

Eyes V. Choate

Skin & partial skel J. Martin

Tissues: J. Martin

area #2







Leu, BR.  
1988

9 AUG 1988

31. Y10623 Rousettus leu. ♂ 120-10-16-18-40g  
MENG LUNG STATION  
Ectos J. Martin forearm: 66mm calcar: 7mm  
Eyes V. Choate Skin & partial skel: J. Martin  
Chromosomes V. Choate Tissues: J. Martin

- 10 AUG 1988 32. Y10624 Pipistrellus mimus ♀ 78-34-7-10-6g  
MENG LUNG STATION forearm 32.3mm  
NO Ectos JLN Skin & partial skel: A.G.C.  
Chromosomes V. Choate Tissues: J. Martin  
Eyes V. Choate

33. Y10625 Rousettus ♀ 123-11-22-18 forearm 74.9g  
tissues - BRS calcar 7  
ECTOS - J. Martin  
skin, skull, partial skel - A.G.C. prep. E. Verwers  
chromo, eyes - V. Choate

34. Y10626 Rousettus ♂ 120-9-20-19 forearm 73mm  
alc. ~~preserved in alcohol~~ - A.G.C. calcar 7mm  
ECTOS - J. Martin prep. A.G.C.  
NO Tissues

35. Y10627 Rattus rattus ♀ 345-172-34-23  
tail all dark, belly white; 3 pr. pectoral, 3 pr. inguinal.  
Area #2  
tissues, alc - BRS  
eyes, chromo - V. Choate  
gave birth in trap to 5 yg (2♂, 3♀)  
Dorsum w/ lg. black bristles mixed w/ hispid-brown  
coloration

Yg. preserved in McDowell's fixative as Y10627a-e  
Repro. tract preserved in McDowell's for anal.







cin, BR.  
1988

→ Macroglossus sobrinus - K. Koopman 2/90

Area #2, Kunming Exp. Sta., Menglung, Yunnan Prov., PRC

Aug. 36. Y10628 ~~Cynopterus sphinx~~ (?) ♂ 185-10-12-17 = 22 gr.  
tissues, alc. - BRS forearm = 47 mm  
calcar = 3 mm  
Dead in Net - not picked out for almost 24 hrs.  
NO ectos

6497 37. Y10629 ~~Rousettus~~ ~~leu.~~ ♂ 100-11-15-24 = 47 gr.  
alc, tissues - BRS forearm = 73 mm  
calcar = 6 mm  
NO ectos - dead in net.

(tissues may be a bit deteriorated).

wh. along edges of ear, rusty at throat

2 Aug. Rubber tree, coffee, tea exper. area, Kunming Exp. Sta., Yunnan

38. Y10630 Cynopterus ♀ 110-9-11-22 = 63 gr. forearm 75 mm  
calcar 6 mm  
ECTOS - A.G.C.

pregnant - lg. yg. > 2 lg. abdominal nipples

yg. preserved as Y10630a in McDowell's Fixative  
Skin + partial skel + skull - A.G.C.

tissues - BRS (2 vials)

~~Y10631~~ Eyes - V. Choate

1° Forest Area #2, Kunming Exp. Stat., Menglung, Yunnan

4975 39. Y10631 Cynopterus sphinx ♀ 108-11-15-22 forearm 75 mm  
calcar 5 mm  
ECTOS - A.G.C. (+ 1 leech) wt = 53 gr.

2 mid abdominal mammae, preg., 1 yg. in pae -  
preserved as Y10631a in McDowell's Fixative  
tissues, alc - BRS

40. ~~Y10632~~ Y10632 Hipposideros ♂ 108-17-12-25 = 19 gr.  
forearm 60 mm  
dorsum lt. brown, darker on ends of hair.  
ECTOS - A.G.C. Chromo., eyes - V. Choate  
tissues - BRS  
Skin, skull, partial skel - A.G.C. testes 5.0 mm



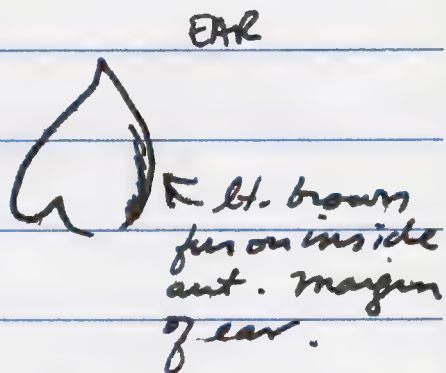
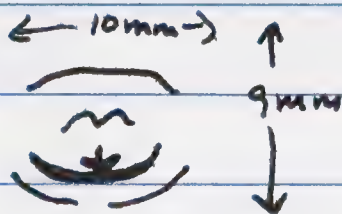




Stem, BR.  
1988

12 Aug.

Y10632 CONT.



Bat Cave, Menglung, Yunnan Prov.

41. Y10633 *Rhinolophus*

♀ 70-20-7-18 = 6.5 gr.  
forearm 42mm

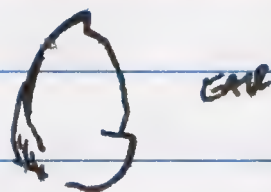
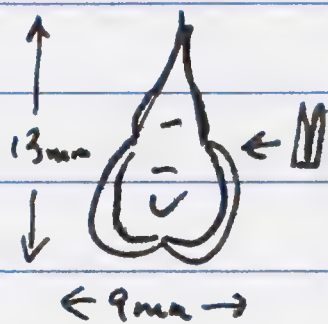
ECTOS - A.G.C.

chromo, eyes - V. Choate

skin + skull + partial skull - A.G.C.

tissues - BRS

velvety dorsum, lt. brownish



Bat Cave, Menglung, Yunnan Prov.

3 Aug. 42. Y10634 *Rhinolophus*

♂ 65-19-6-19 = 7 gr. forearm 45

Ectos - A.G.C.

skin + <sup>partial</sup>skel + skull - A.G.C.

eyes - V. Choate

tissues - BRS

lg. capsule on rt. ear  
opened to reveal sm.  
larval form.

animal dead in net over top of cave.

~~Y10633 + 34~~

(Y10633 + 34 - same sp. <sup>prob.</sup>)

Area #2, Menglung, Yunnan Prov.

43. Y10635 *Cynopterus sphinx*

♀ 110-4-13-18.5 = 40 gr  
forearm 71  
calcar 7

ECTOS

skin, skull, partial skel - A.G.C.

tissues - BRS

caught 12 Aug.





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Bat Cave, Menglung, Yunnan Prov.

13 Aug. 44. Y10636 *Rhinolophus* ♀ 68-19-6-19 = 8g.  
forearm 45

ECTOS

eyes + chromo - V. Choate

tissues - BRS

skin, skull, <sup>partial</sup>skel - AGC

lg. capsule on on left ear - hard, calcified, will not open. Another capsule on left pseudotragus + capsule saved w/ the larvae

45. Y10637 *Hipposideros armingeri* ♀ 155-62-18-32 = 44g

ECTOS

forearm = 90

chromo - V. Choate

tissues - BRS

skin, skull, <sup>partial</sup>skel - AGC

a cobra-head-like protuberance, paired, innerv. cranial to vaginal opening!? Only right one developed, left one diminutive.

Removed from study skin + put in McDowell's fixative.

46. Y10638 *Pipistrellus minimus* ♀ 55-36-7-12 = 3g.

skin + skull + <sup>partial</sup>skel - AGC. forearm - 35 mm

no tissues

ECTOS

chromo - V. Choate

47. Y10639 *Rhinolophus*

♀ 70-24-9-18 = 8g.

skin + skull + <sup>partial</sup>skel - AGC. forearm - 44.5

tissues - BRS

DIED IN BAG

ECTOS

3 capsules found at base of rt. ear; removed.





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1988

Area #2 Menglun, Yunnan Prov.

- 13 Aug. 48. V10640 *Rattus rattus* ♀ 370-220-32-25 = 138g.  
call. 12 Aug. 3 pr. mammae  
skin, skull, + partial skel - C. Wozencraft (A.G.C.)  
tissues - BRS 3 vials  
gut - G. Hickling repro. tract - A.G.C.  
EYES, chromo - V. Choate
49. ~~V10640~~ V10641 *Rousettus leu.* ♀ 125-16-22-20 = 59g.  
call. 12 Aug. forearm = 82mm  
1 pr. mammae  
tissues, alc - 2 vials - BRS  
ECTOS

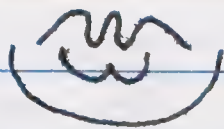
Bat Cave, Menglun, Yunnan Prov.

50. V10642 *Rhinolophus* ~~POUXI~~ <sup>SINICUS</sup> ♀ 70-25-10-18 = 8g.  
forearm 47mm  
ECTOS  
alc., tissues - BRS (A.G.C. may want for ID)



51. V10643 *Rousettus* ♂ 98-11-20-17 = 31g.  
forearm 65  
NO tissues - DEAD in NET. I was out in field.  
yg. bat  
ECTOS  
skin + partial skel + skull - A.G.C.

52. V10644 *Aselliscus stoliczkanus* ♂ 78-30-5-11 = 5g.  
~~Hypodactylus~~  
forearm 42mm  
NO tissues  
Skin, skull, partial skel - A.G.C.  
ECTOS



Wh. breast, dorsum lt. brown w/ base hairs whitish





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1988

#2 Bat Cave, ~10 km. down river from cave #1

- 14 Aug. 53. Y10645 Taphozous ♀ 130-23-10-28 = 35g.  
ECTOS forearm 76  
skin, skull, partial skel. - C. Wozencraft (A.G.C.)  
tissues - BRS
54. Y10646 Tadarida ♀ 116-45-16-18 = 25.5g.  
preg. = Y10646a preserved in McDowell's Fixative forearm = 49  
wrinkle lip  
ECTOS  
skin, skull, partial skel - AGC.  
tissues - BRS
55. Y10647 Tadarida ♂ 120-43-11-20 = 22g.  
ECTOS forearm 49 mm  
wrinkle lip  
tissues - BRS  
skin, skull, partial skel - AGC
56. Y10648 Taphozous ♀ 121-25-7-20 = 39g.  
ECTOS forearm 75  
tissues - BRS calcar 20  
skin, skull, partial skel - AGC
57. Y10649 Tadarida ♀ 119-44-11-22 = 21.9g.  
wrinkle lip forearm 48  
ECTOS calcar = 9  
skin, skull, skel - C. Wozencraft (A.G.C.)  
tissues - BRS
58. Y10650 Tadarida ♀ 135-41-9-20 = 25g.  
preg. forearm 49  
alc - A.G.C.! calcar - not obs.  
ECTOS NO tissues





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#2 Bat Cave CONT.

- Aug. 59. Y10651 <sup>Chaerephon plicata</sup> ~~Fadenida~~ ♂ 114-40-11-21 = 22g.  
alc., tissues - BRS forearm 50  
ECTOS calcar 10  
- Dead in net
60. Y10652 Taphozous ♂ 120-28-11-25 = 32g.  
ECTOS forearm 73  
calcar 7(?)
- NO tissues, alc - AGC. Dead in net
61. Y10653 Taphozous ♀ 120-31-14-25 = 34g.  
ECTOS forearm 74  
calcar 22
- alc., tissues - BRS Dead in net
62. Y10654 Taphozous ♀ 116-25-16-24 = 32g.  
ECTOS forearm 74  
calcar 22
- alc, tissues - BRS Dead in net
63. Y10655 Taphozous ♀ 130-28-12-27 = 40g.  
ECTOS forearm 75  
calcar 20
- alc, tissues - BRS Dead in net
- preg. lactating
64. Y10656 Taphozous ♂ 123-22-10-25 = 40g.  
ECTOS rust-colored fur forearm 75  
ventral surface of neck calcar 21
- alc, tissues - BRS Dead in net
65. Y10657 Taphozous ♂ 123-28-13-26 = 32g.  
alc, tissues - BRS forearm 75  
ECTOS - calcar 21  
Dead in net
66. Y10658 Taphozous ♀ 117-25-13-25 = 32g.  
ECTOS forearm 74  
calcar 20
- alc, tissues - BRS Dead in net
67. Y10659 Taphozous ♀ 125-27-16-23 = 31g.  
ECTOS forearm 74  
alc, tissues - BRS calcar 19  
Dead in net





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#2 Bat Cave, CONT.

4 Aug. 68. Y10660 Taphozous ~~thomasi~~ ♀ 118-27-12-24 = 30gr.  
ECTOS forearm 75  
calcar 19

alc., tissues - BRS

Dead in net

69. Y10661 Taphozous ♀ 114-25-11-23 = 32gr.  
ECTOS forearm 73  
calcar 19

alc., tissues - BRS

~~♀ 114-25-11-23 = 32gr.~~

Dead in net

5 Aug <sup>Bat</sup>  
#2 Cave CONT.

70. Y10662 Taphozous ♀ 123-26-11-26 = 29gr.  
coll. 14 Aug. forearm 71  
calcar 20

ECTOS

alc., tissues - BRS

71. Y10663 Taphozous ♀ 125-27-10-25 = 33gr.  
coll. 14 Aug. forearm 74  
calcar 19

ECTOS

skin, skull, partial skull - AGC.

tissues - BRS + muscle

72. Y10664 Taphozous ♀ 116-20-9-23 = 29gr.  
ECTOS forearm 72  
calcar

coll. 14 Aug.

tissues - BRS + muscle

skin, skull, skull - AGC

→ Area #2, ~~Mohs lung, yunnan~~  
73. Y10665 *Acelliscus stoliczkanus* ♂ 75-36-6-11 = 4.5gr.  
coll. 14 Aug. - dead overnight forearm 41  
calcar 7

Alc. ~~tissues - BRS~~ - AGC

photo of face - AGC.

Wh. belly, deep set ears + eyes, ears almost tubular  
not tissues!





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~~Area #2, Menglung~~ Area #2, Menglung

- 15 Aug. 74. Y10666 Rhinolophus ♀ 74-18-6-18 = 7.5 gr.  
coll. 14 Aug. - dead overnight forearm 45 mm  
alc. - AGC. calcar 7 mm  
no tissues

~~This spec. has 3 hard calcaneous capsules left intact.~~

Area #2, Menglung, Yunnan Prov.

75. Y10667 Rousettus ♀ 133-18-21-20 = 52 gr.  
coll. 14 Aug. - dead forearm 75  
alc., tissues - BRS calcar 7  
chromo - V. Cheate

#2 Bat Cave

76. Y10668 <sup>chaerephon</sup> ~~Tadarida~~ plicata ♀ 110-36-11-20 = 22 gr.  
coll. 14 Aug forearm 48  
preg. - fetus preserved as Y10668 calcar 7  
ECTOS

tissues, alc - BRS + 1 vial blood!

77. Y10669 Tadarida ♂ 118-48-10-18 = 20 gr.  
coll. 14 Aug. forearm 50  
ECTOS calcar 14

skin, skull, + partial skull - AGC.

tissues - BRS + muscle

chromo - V. Cheate

78. ~~Y10670~~ <sup>chaerephon</sup> ~~Tadarida~~ plicata ♂ 114-40-9-21 = 20 gr.  
coll. 14 Aug. forearm 48  
calcar 10

ECTOS

tissues, alc - BRS

chromo - V. Cheate





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#2 Bat Cave

- 15 Aug. 79. Y10671 <sup>Chaerephon</sup>~~Tadarida~~ plicata ♀ 115-43-10-21 = 24 gr.  
Coll. 14 Aug. preg. - AGC has fetus forearm 48  
calcar 7  
Chromo - V. Choate - from sternum  
alc., tissues - BRS + muscle + 1 vial blood  
ECTOS (chest gone - perhaps should make skel.)
80. Y10672 <sup>Chaerephon</sup>~~Tadarida~~ plicata ♀ 117-42-11-20 = 25 gr.  
coll. 14 Aug. forearm 49.5  
calcar 11  
preg. - fetus preserved by A.G.C.  
ECTOS  
alc., tissues - BRS
81. Y10673 <sup>Chaerephon</sup>~~Tadarida~~ plicata ♀ 115-41-9-21 = 25 gr.  
coll. 14 Aug. forearm 50  
calcar -  
ECTOS  
preg. - fetus used to extract chromo.  
tissues, alc. - BRS + 1 blood vial
82. Y10674 <sup>Chaerephon</sup>~~Tadarida~~ plicata ♀ 109-42-9-19 = 24 gr.  
coll. 14 Aug. forearm 48  
calcar -  
preg. - fetus preserved in formalin - BRS  
alc., tissues - BRS + 1 blood vial  
ECTOS
83. Y10675 <sup>Chaerephon</sup>~~Tadarida~~ plicata ♀ 110-36-9-22 = 22 gr.  
coll. 14 Aug. forearm 49  
calcar -  
alc., ~~tissues~~ - BRS - spec. bloated!  
Dead in bag? ← no tissues  
ECTOS
84. Y10676 ~~Tadarida~~ (?) ♂ 114-46-10-21 = 20 gr.  
coll. 14 Aug. forearm 48  
calcar -  
ECTOS  
Skin, skull, partial skel - AGC  
tissues - BRS + muscle





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#2 Bat Cave

- 176512  
15 Aug. 85 Y10677 <sup>Chaerephon</sup> ~~Tadarida~~ plicata ♀ 114 - 37-12-20 = 19g.  
ECTOS forearm 48  
calcar —  
alc., tissues - BRS + 1 blood vial  
coll 14 Aug.
- 76513  
86 Y10678 <sup>Chaerephon</sup> ~~Tadarida~~ plicata ♂ 115 - 41-10-23 = 18g.  
ECTOS forearm 50  
calcar —  
coll. 14 Aug.
- 76514  
87 Y10679 <sup>Chaerephon</sup> ~~Tadarida~~ plicata ♀ 121 - 47-13-20 = 27g.  
ECTOS forearm 49  
calcar —  
coll. 14 Aug.
- alc., tissues - BRS - some blood in w/ tissues
- 76515  
88 Y10680 ~~Taphozous~~ <sup>Thyroptera</sup> ♂ 116 - 32-16-24 = 30g.  
ECTOS forearm 72  
calcar 20  
coll. 14 Aug.
- preg. Fetus preserved in formalin - BRS
- 76516  
89 Y10681 ~~Taphozous~~ " ♂ 118 - 31-14-26 = 28g.  
ECTOS forearm 72  
calcar 20  
coll. 14 Aug.
- chromo (forearms) - V. Choate  
alc., tissues - BRS (some blood w/ tissues)
- 76517  
90 Y10682 ~~Taphozous~~ " ♂ 118 - 30-12-24 = 31g.  
ECTOS forearm 72  
calcar 20  
coll. 14 Aug.
- chromo - V. Choate (forearms)  
alc., tissues - BRS (some blood w/ tissues)
- skin, skull, <sup>partial</sup> skel - AGC  
tissues - BRS + muscle + some blood





Stein, BR  
1988

## #2 Bat Cave

15 Aug 91 Y10683 Taphozous ~~humboldt~~ ♀ 123-35-15-27 = 33 gr.  
coll. 14 Aug forearm 74  
calcar 20  
ECTO

chromo (forearms) - V. Choate

alc., tissues - BRS (some blood w/ tissues)

92 Y10684 Taphozous ♀ 123-35-15-26 = 36 gr.  
coll. 14 Aug forearm 76  
calcar 21

ECTOS

lactating - nipples in  
upper pectoral  
area

Skin, skull, partial skel - AGC.

⊗ cinnamon brown pelage → diff. color phase?  
diff. sp.?

tissues ~~skin~~ - BRS  
eyes - V. Choate

w/ muscle + some blood

93 Y10685 Taphozous ♀ 123-33-15-27 = 36 gr.  
coll. 14 Aug. forearm 72 mm  
calcar 21

ECTOS (lice)

lactating - nipples in  
upper pectoral  
area

⊗ cinnamon brown pelage

Skin, skull, + partial skel - AGC

tissues - BRS + muscle  
eyes - V. Choate

94 Y10686 Taphozous ~~humboldt~~ ♂ 119-30-13-25 = 32 gr.  
coll. 14 Aug. forearm 74  
calcar 21

ECTOS

alc., tissues - BRS

Area #2, Menglung, Yunnan Prov.

95 Y10687 Cynopterus ~~sp.~~ ♂ 105-10-17-21 = 46 gr.  
ECTOS forearm 73  
calcar 7

alc., tissues - BRS + 2 vials blood





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1988

Area #3, Menglung, Yunnan Prov. - <sup>steep slope</sup> amongst rocks

15 Aug 96. Y10688 *Rattus*(?) ~~mus~~ ♀ 320-180-28-22 = 70g.

2 pr. pectoral + 2 pr. abdominal mammae  
tail bicolored, distal 1/4 bleached white,  
tip of tail w/ dark tuft,  $T > HB$   
dorsal surface brownish grizzled w/ black  
HF + forefeet white dorsally  
white ventor w/ distinct demarkation laterally  
throat white

gut length - G. Hickling  
tissue - BRS + muscle (2 vials) <sup>repro. tract w/  
4 embryos</sup>

Skull (only?) - AG.C. (for Musser to I.D.)  
ECTOS

eyes - V. Choate chromo (femur) - V. Choate

97. Y10689 *Rattus*(?) ~~mus~~ ♂ 320\* - 158\* - 30 - 24 = 106g  
\* tail broken - tip off

gut length - G. Hickling

tissue + alc - BRS

ECTOS

Same body description as Y10688

EYES + chromo - V. Choate (femur)

~~all the tissue is in the eye w/ cataract~~

98. Y10690 *Rattus* ~~mus~~ *rattus* ♀ 380-210-33-24 = 122g.

tail monochrome, bl. scaly,  $T > HB$

nipples - 2 pectoral, 3 pelvic

eyes - V. Choate + chromo (sternum)

gut - G. Hickling

alc., tissues - BRS

rt. hindft. caught in Sherman trap  
fur grizzled, wh. belly





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Area #3, Menglung, Yunnan Prov. - CONT.

6 Aug. 99 Y10690 *Niviventer* (?) ~~bukit~~ ♀ 318-176-29- = 68g.

~~holder~~ 2 pelvic, 2 pectoral mammae  
bicolor tail, buff belly.

light dorsum on HF

fur w/ spines dorsally

nibbled by ant → no ear measurement

collector = BRS

alc, tissues - BRS + muscle

4 embryos

→ caught in snap trap in sparsely wooded area  
gut - G. Hickling

100 Y10692 *Niviventer*! *fulvescens* ♂ 340-190-31-20 = 88g.

coll. 15 Aug.

ECTOS

dorsal coarse black guard hairs on  
rust brown, ventor creamy. tail  
bicolored. cheeks light brown.

tissues, BRS (2 vials)

Tops of feet brown w/ ~~wh.~~ wh. margin

gut - G. Hickling

skin, skull, partial skel - AGC

eyes, chrono - V. Choate

Bat Cave #4, ca. 10km E. Menglung, on opp. side of slope of cave #2

101 Y10693 *Hipposideros armingeri*

♀ 165-58-18-34 = 57g.

ECTOS

forearm 93  
calcar 23

alc., tissues - BRS

chrono - V. Choate (forearm)

Brown ~~grey~~ body color on dorsum; w/ cobra

102 Y10694 *Hipposideros armingeri*

♂ 162-55-16-33 = 45g.

grey dorsum

forearm 93  
calcar 21

ectos





Stein, BR  
1988

Bat Cave #4, CONT.

6 Aug.

tissues - BRS

chromo - V. Choate

skin, skull, partial skel - AGC

103 Y10695 *Hipposideros armiger* ♀ 159-58-16-34 = 56g  
forearm 93  
calcar 20

tissues - BRS

skin, skull, partial skel - AGC

eyes, chromo - V. Choate

dark brown dorsum, lt. brown ventor

104 Y10696 *Hipposideros armiger* ♀ 157-67-19-32 = 55g  
forearm 94  
calcar 22

dark brown dorsum

ECTOS

alc., tissues - BRS

105 Y10697 *Hipposideros armiger* ♀ 162-65-11-35 = 45g  
<sup>gray</sup>  
~~dark brown~~ dorsum  
forearm 97  
calcar 19

ECTOS

alc., tissues - BRS

106 Y10698 *Hipposideros armiger* ♀ 160-62-12-36 = 54g  
forearm 97  
calcar 20

dark brown dorsum

ECTOS

alc., tissues - BRS

107 Y10699 *Hipposideros armiger* ♂ 155-60-16-33 = 57g  
forearm 99  
calcar 22

ECTOS

alcoholic - AGC (wanted "complete" spec)

~~tissues - BRS~~

NO tissues

dark brown pelage





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Aug. 108 Y10700 *Hipposideros armiger* ♀ 155-58-11-35=50g.  
ECTOS forearm 91  
calcar 19

eyes, chromo - V. Choate

skin, skull, partial skel - AGC 8817

tissues - BRS

cinnamon brown pelage

109 Y10701 *Hipposideros armiger* ♀ <sup>153</sup>~~149~~-58-16-34=46g.  
alc, tissues - BRS forearm 93  
calcar 23

no ECTOS - dead in bag

grey pelage

110 Y10702 *Hipposideros armiger* ♂ 157-61-17-35=53.5g.  
ECTOS forearm 98  
calcar 23

alc, tissues - BRS

dark brown

111 Y10703 *Hipposideros armiger* ♀ 162-62-16-35=52g.  
ECTOS forearm 92  
calcar 21

dark brown

alc, tissues - BRS





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1988

Elevation / Lat. / Long.

15 Aug.

From C. Wozencraft

Menglung 21° 55' N 101° 17' E ca. 600 m.

Area #1 21° 57' N 101° 11' E ca. 650 m.

Area #2 21° 53' N 101° 18' E 700 m.

Area #3 21° 57' N 101° 20' E ca. 950 m.

Station 21° 55' N 101° 16' E ca. 600 m.

#1 Bat Cave 21° 53' N 101° 18' E

limestone #2 Bat Cave 21° 55' N 101° 20' E

#3 Bat Cave was in area #3 - we netted there  
one night but no captures

granite #4 Bat Cave - lg. Hipposideros armingeri - on  
opp. side of mt. from cave #2

---

Drive from Menglung to Kunming

- 1st night Szmao (570 km.)

1st lunch Tun guan 通关

- 2nd night Yenjiang 元江

2nd lunch - Yu Xi Shan





B.R. Stein  
1988

Journal

China: Menglung, Yunnan Prov.





rein, B. R.  
1988

2 Aug. ca. 2 km. outside Mengla<sup>Yung</sup>, Institute of Ecology, Academia Sinica  
Field Station, Mengla<sup>Yung</sup>, Yunnan Prov., PRC.

Drove south from Kunming ~~700~~<sup>698</sup> km., turned east on 1st major/only turnoff. Continued ca. ~~60~~<sup>65</sup> km. to field station. Arrived about 7:00pm. About 9:00pm split into 3 groups - one set 3 lg. live traps for carnivores, one set up a mist net, and ours set out 2 lines of Victor's + museum specials. Used p.b. but expect little as ants will get it unless we have more substantial bait.

Drive in was continual up + down over the mountains. This is obviously rainforest but the extent of cultivation is enormous (and impressive in view of the human power used to terrace the hillsides). Brief intermittent rain showers along the way. Won't be able to assess vegetation in the immed. vicinity of the station until morning.

Actually flew from Kunming to Sgmao + drove from Sgmao to station. However, km. markers are from Kunming. Flight was prop. plane flying ~5,000' alt.; took 1 1/4 hrs. Sgmao is the southernmost airport in China.

3 Aug. Up at 7:15 am. to check traps. Because China has no time zones it is still dark. We must be ca. 2 hr. west of Beijing in terms of the sun. Went to see where Art had set up bat nets. Must have had 6 Rousettus - but he is letting them go! He checked them once, about





Stein, B.R.  
1988

3 Aug. an hour after he put them up + then left them all night. Can't believe he's letting stuff go — he says they're so common in Yunnan! Hope we can change his mind. He wants everything live for ectoparasites and may frown on our snap trapping. graham Hinkling got one Niviventer on traps we set at the last minute under the bridge by the main building. He wants guts, I'll tissue + then pickle.

We are definitely not in primary forest altho we did seem to drive through such an area about 10 min. before arriving here. Also the Institute has control over such an area which they did/would not even let us look at last year but are willing to this year. Nothing will probably be done until Wudelin gets here tonite. Art is now negotiating to get some lab space set up so we can begin processing animals. With the Chinese everything is one delay after another.

The area where our traps were set has palms, 6' grasses, and rubber trees being tapped. The bat nets went up in an area that had been cleared.

At 2:30 we were to go to 1° forest — instead got a tour of rubber, tea, coffee trees in the experimental station. Were finally taken to a small area of 2° forest to trap. Set out Shermans, Victors, Museum specials + one lg. high bat net. Won't be





Stein, B. R.  
1988

3 Aug able to check them until tomorrow! Am tussuing and pickling this mornings' bats + rat + the Beijing snake.

4 Aug. Caught a small Anolis-type lizard in the lab last nite. Tried to tissue it but there just wasn't much there.

This a.m. we were taken to our first area of primary forest - back out along the road we came in on, btwn. Km. marker 51 + 52. A really nice area; spent about 1 1/2 hr. walking the trail. After lunch it was to primary forest area #2 - about 2 km. down the road as it continues past the the entrance to the Institute. Also a nice area, but muddier. Spent about 1 3/4 hr. going along the trail - this time we brot some traps; set up a mist net. Not too many as we weren't sure what the area was like. We finished up at 4:00pm. Everyone else was ready to go back but Chris + I took 30 traps + went back + set them in area #1. It took only 1 3/4 hr. Both areas had streams but were relatively dry for rainforest. Have had no rain since we arrived + this is supposed to be monsoon season. Saw what was tentatively ID'ed as civet scat in area #1 - that area has lots more fruiting trees than area #2. Chris claims to have seen a squirrel + 2 "rats" scampering in the trees in area #2. Both have dense vegetation, the latter w/ periodic small clearings +





Hein, B.R.  
1988

4 Aug

unusual rock formations. Saw an old termite/ant mound w/ large openings → pangolin had been feeding there in the past.

Bot a bamboo rat from the locals for 6 yuan! Graham will keep it alive and try to get it to eat so he can measure digestive efficiency, etc. I've asked Art about the possibility of getting one pickled and there seems some hope. One way or another this one will end up as a specimen as Graham has no permits to bring things back to New Zealand. The locals also had 2 large monitor lizards they would have been happy to sell (they're sure we're eating the stuff) but, alas, no permits.

With much fanfare + commotion caught a *Hipposideros* in the room next to ours last night. Art wants chromosomes - maybe I'll get the pickle.

5 Aug.

Light rain all night. Split into 2 groups to check traps. Chris + I went back to area number #1 - nothing, altho many of the traps had been sprung. I think it may have been the rain? The 2nd group fared no better, not even bats. From here on in we'll probably concentrate our efforts in area no. #1. We'll reset tonight and add a line of Shermans. Area #1 at least had more signs of animal life. Still overcast this morning altho no rain.





Stein, BR.  
1988

5 Aug.

Will use the "free time" to pickle the toad + the very small lizard I just grabbed.

6 Aug.

Rained hard all night, stopped by morning, started again by the time we checked traps — Nothing!

Much of the bait gone or Vectors set off — I think due to rain. The trail is really taking a beating.

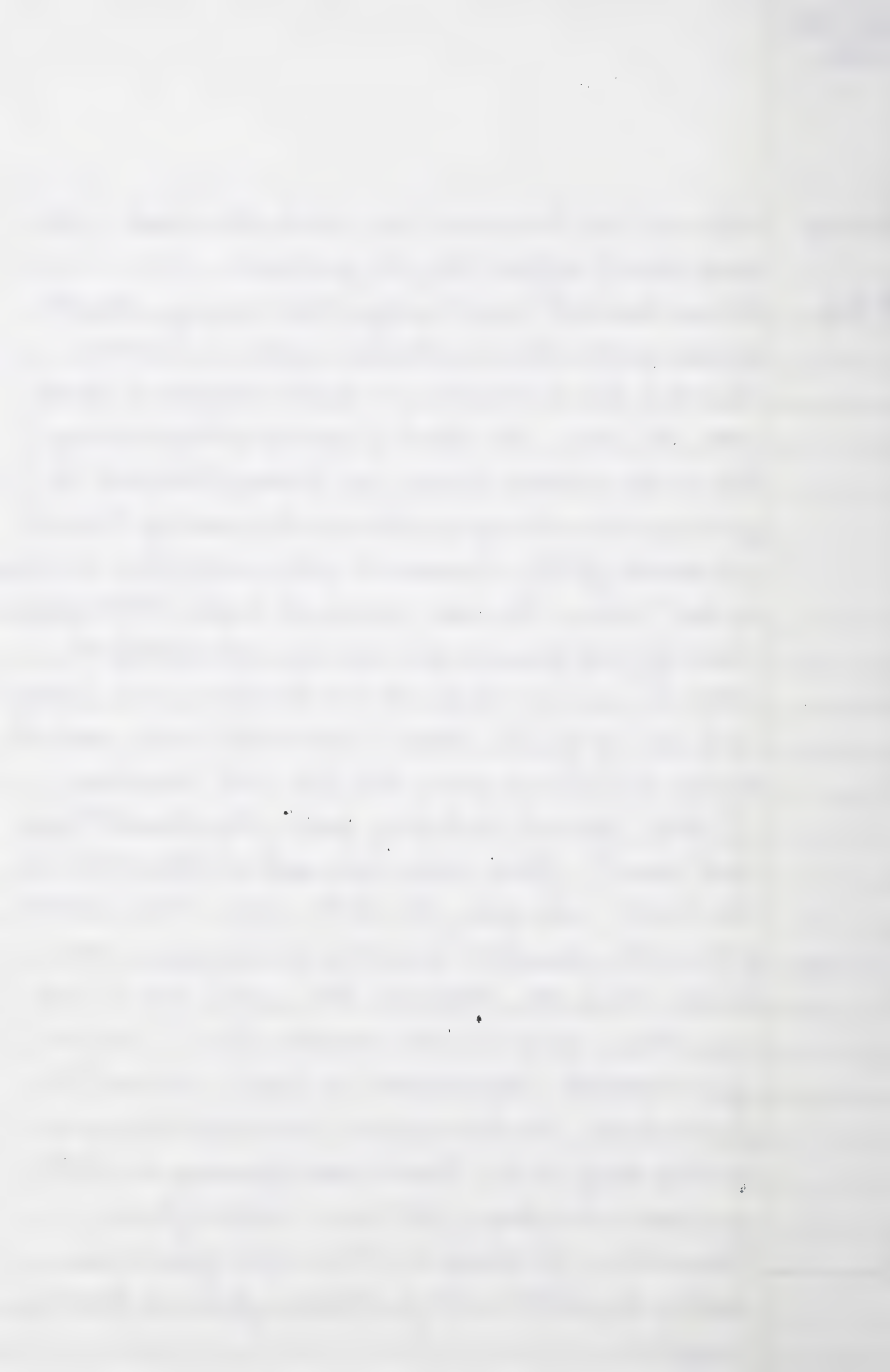
Back at 10:00am today (vs. 9:00am previously to give you an idea of how the mud is making this all so much fun). Lunch at noon, out again ~1:15pm. to set them. By ~~now~~ 1:30pm. it began to pour!

Took off my glasses for the day — absolutely no way to pee up them in the driving rain. Setting is a bit of a joke, there's probably better ways to do it in pouring rain but I'm still learning.

If the forest is full of fruit why should they eat ours? Some may also not be this close to the trail. So far for bait we've tried potato, p.b., oat, peanuts, bananas, pineapple, worms.

By the time we reached the river bed it had swollen to 35' + was moving fast! The five of us waded downstream a ways, stowed our gear high, linked arms, + made it across in crotch deep H<sub>2</sub>O. Driver was cruising a stretch of road looking for us. Such fun.

However, Graham + Chris did find one Rattus in pretty sorry shape from a morning trap!



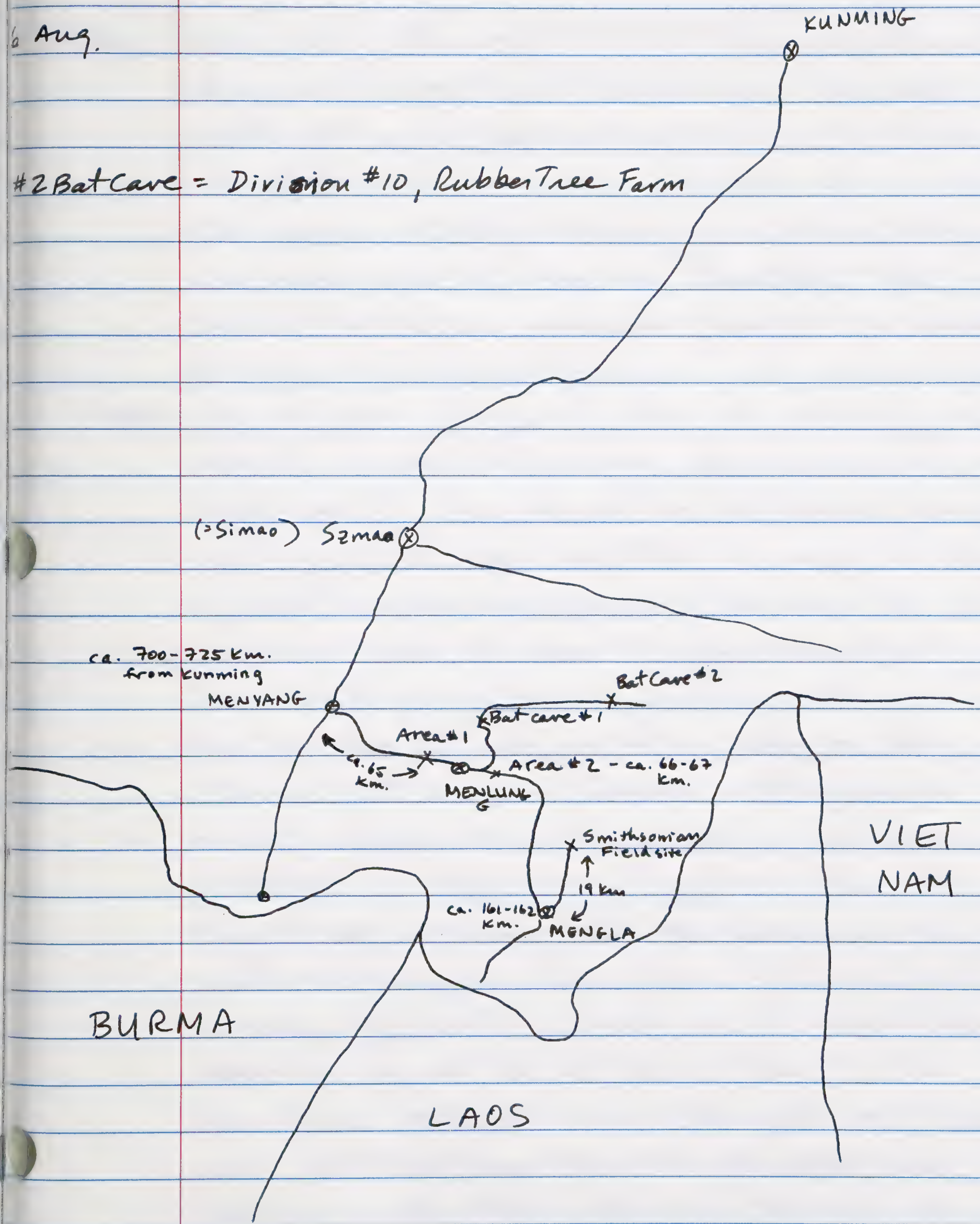


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1988

NOT TO SCALE

6 Aug.

#2 Bat Cave = Division #10, Rubber Tree Farm







Stein, B.R.  
1988

7 Aug. Rain most of the night. Nothing in the traps at area #1. Some still have the bait untouched. Two bats collected in net at entrance to area #2 - one Rousettus, one Cynopterus - Art says a new sp. from this region. Really discouraging. Decide to try one more night at area one. Reset all traps, moved those w/ any indication of ants or w/ unlikely placement - hope springs...

8 Aug. Rained from 8:00pm on last nite - pouring from about 2:00am till dawn. No way can we check area #1, the river will be too swollen, to say nothing of the trail itself which would be like a giant slalom mud course. Art went to check bat nets at area #2 after breakfast. The bamboo forest trip is postponed yet again + we've been up the for 24hr, going on 36hr. Rained till 11:30am. Caught 2 bats again in area #2. After lunch the woman in the kitchen produced a Herpestes javanicus. She had mentioned yesterday that she had one in her yard so Steve gave her a trap. It's small but he may try putting a collar on it nonetheless. Headed out to pull all the traps at area #1. The blue Toyota made it to w/in 2km. of the trail, then died. Not surprising since the oil light has been on + the thing is missing 3rd gear. We walked to the trail - only light rain thank goodness.





Stein BR  
1988

8 Aug.

All the traps still empty and will need lots of clearing. Am glad that's our last trip as the trail has really been abused. Chris caught a small skink (?) for me. Don't understand why we haven't seen any salamanders!?

Graham caught 2 more rats for me - this time in traps set out by our kitchen. I hate to pickle everything but it's the only way I know of to get it out of here.

Steve did collar the mongoose + they managed to track it down after dinner. Art is putting out another bat net. Spent the evening tussling the day's catch. Tomorrow all our traps go over to area #2.

9 Aug.

A second mongoose, same sp., was brot in last nite. Steve collared that one too + Karen has stayed back today to track them every 1/2 hr. while we go set traps. Art decided the bamboo rat wouldn't live another day so he decided to take eyes, femur for chromo, gut, tissues, + then decided the skin wasn't so great - so I got to pickle it. Yeal for our side.

The trail to area #2 is as bad or worse than that for #1. No hand holds! Put out 100 phermans, some tomahawks + couabears, then quit. Left the remaining traps up there





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1988

9 Aug.

to be set tomorrow. Graham + Chris went to "the bamboo forest" today - a real disappointment - a very small patch or area that has been cut, burned, + grazed. Lots of leeches - no bamboo rats. Talk is now for us to visit the new Mengla Field Station on the 11th. Want to go but hate to lose the trap nites as our success is so low - this will probably be an overnight trip; roads + conditions dubious. The general weather pattern since the first few days has been rain most of the night, cloudy early morning, rain late morning, cloudy midday, light to heavy rain afternoon, on + off again early evening + on again at nite. Very humid always but not excruciatingly hot.

10 Aug.

A busload of Chinese arrived last nite - tourists! But why here?! Rain during the nite. One Pipistrellus in the net this a.m. Art leaves the nets open all day, doesn't move them, + doesn't check them during the night. No rain this a.m. or afternoon. Five us went back to area #2 to check traps + close them as we're to go to Mengla tomorrow. Put out rest of the Shermans + "snaps" so they'll be in place to bait when we return. Only





Stein, B.R.  
1988

10 Aug.

one Rattus, ♀ that had 5 yg. in the trap. How disappointing. More time reading than in the field but these are the only areas they'll let us work. Dr. Wu got upset because Chis wandered off to do some exploring - was afraid he'd get lost - ha! What's worse, he missed lunch, a positive sin by Chinese standards. They never miss a meal. Chis claims to have found "bamboo rat heaven." I'd love to believe it was so.

11 Aug.

Today the proverbial shit hit the fan. Our plane reservations from Kunming to Hong Kong are screwed up + no one here is capable of straightening things out. We may have to leave here as early as the 14th if we are to get to H.K. in time for our flight - There's no way we can cancel those tickets. But what put the icing on the cake was our trip to Mengla today. Beautiful weather - no rain for 24hr. Art checked the bat net in the rubber tree grove at 7:00 am. only to find it had been stolen. We loaded the cars before 9:00 am. + headed off. Mengla is a 3hr. drive on the road that continues east from this field station. Beautiful mountains, most of which have





Stein, BR  
1988

11 Aug. been cleared + planted. Rice primarily, but also corn. We arrive in Mengla + are told it would be an hour until lunch so we get a "sightseeing tour" of town to kill time. Lots of PLA here as we are near the border now. After lunch it is just 19 km. North from town (the only big road heading north out of town) to the site of the proposed Man-in-the-Biosphere Smithsonian Field Station. This is 1° forest. The tallest trees we have seen in China. The Reserve has been divided into 2 sections, one north, one south of the road. The narrow neck of road and the land on either side of it is not part of the Reserve and hence, cultivated. So we finally arrive, the weather is glorious, and we are told we have 50 min. + then we head back! We could not walk too far up the road — "too dangerous". Not too far into the forest — "might get lost." That's when Art really began to lose it. (I, personally, would have thrown a gasnet 2 days ago, and nearly did).

We stopped on the way back to <sup>check</sup> ~~set~~ the 2nd bat net which had been up 24 hr!





Hein, BR  
'1988

11 Aug.

2 Dead bats (which Art let me pickle), one live bat (which should have been put up tonight + will probably be dead by tomorrow), + 4 dead birds. What a waste. Dr. Wei, the ornithologist, took the birds, and tonight I saw them lying out on the window sill w/ identifications. But what will he do w/ them? Nothing probably. Wei has the most potential, is the most independent, but seems so handicapped by the system. How hard would it be to learn how to pickle birds. We got back in time for dinner, one I could have done easily w/o, + I asked Art about setting the Sherman's tonight. None of his undergrads has any real motivation and I could feel the negative messages from around the table as I even raised the subject. Art was to the point of steaming about the plane tickets as again we had made no headway on the problem all day. Art looked around + taking his cue from people's faces said we'd just set them in the morning. As I left dinner Graham offered to go w/ me if I wanted to set them. I would not have considered





Stein, BR  
1988.

11 Aug.

it except that up rain for 24 hr. I knew that the trail would be as good as we might hope for. Getting a driver was another matter. God forbid they should have to work. Art + Vicki went out to set up another net in place of the one that was stolen. I didn't want to dawdle as it would be getting dark. Wu was throwing a fit — he felt he should go, then we'd need a bigger car. Different car means different drivers, more delays. I just said, "let's go" + we took off.

Graham + I did the line, up + back in record time. Got back, showered, + Art sent word I could pickle the 2 dead bats. As I went to the lab to work on them he was there. Turns out that Wu + Patrick got a 2nd car + followed them to the netting area. That's when Art let him have it, told him he'd uphold \$ for lost days, deduct \$ for new plane tickets, that we were here to work, not "sightsee", what kind of sloppy operation was this, and he just might not come back next yr. .... Andy Smith said you can never lose your





Stem, BR  
1988

11 Aug

temper of the Chinese but I have to side w/ Art. How long do you let them jerk you around? How long do you let them play the \$ game? And for what? neither of these 1<sup>st</sup> forest areas are anything like the reserve area we visited today. Both are much larger than we've seen yet we are restricted from exploring. Both are trafficked by "tourists" because the Chinese have no sense of ecology + litter mercilessly. And yet they are so sure they are right. This area is beautiful, even the cultivated fields, but there is so little of it left and it is so poorly managed, or not managed at all. I do not regret a minute of this trip and in many ways it has been most successful. But I am also exceedingly grateful that I have no need or desire to establish a long-term research program here.

P.S. Since I got a bit "testy" w/ Patrick 2 days ago the water has not been turned off once! How much bullshit do they think I'll put up w/!

12 Aug.

Miracle of miracles - Mr. Fang, Dir. of the Ecology Inst. in Kunming, has confirmed





Stein, BR  
1988

12 Aug. our reservations for the 20th! Will wonders never cease. That means Chris + I split the pool which bet on our day of departure. Another day morning. Eric went w/ Troy, Chris, Michelle + Graham to check the traps. One Rattus, again on Art's line. Tired this am. + glad to stay in. Went for a short walk w/ Karen + upon return it was time to tissue the bats Art had put up. Both were preg. ♀'s - one w/ yg. almost full-term, the other w/ well-developed yg. in placental sac. Pickled both yg. + one of the adults (Cynopterus). After lunch most of us went in search of the bat cave up in the hills on the 1st left turn-off on the way to area #2. Not a bad climb + the guide did all the work. The cave is quite spacious, but seemed to hold ~100 bats, including Hipposideros armingeri, which Art would really like to get. Placed one lg. net inside, 2 old ones across the main entrance + one across a large opening in the ceiling. Undoubtedly there are numerous small entrances + exits over which we have no control. The cave itself averages 12' in height, 30' at the rear, tapering off in





Stein, BR  
1988

12 Aug.

several areas. Evidences of old campfires means we are not the first or the only visitors. The cave, main chamber, is easily 50' in length. There are 4 steps down into the main chamber from an outer room + some of the walls have been plastered. The best guess is that it was used by one side or the other during W.W. II or the Japanese invasion. I would expect the hillsides are full of such caves + that some might be / have been inhabited by the locals. Our guide scampered around + caught us one Rhinolophus by hand - such a perfect horseshoe noseleaf - much more impressive when alive than dead. The cave itself is probably 20° cooler than the outside air which today was hot + humid. You can feel the temp. drop as you approach through the vegetation. Water drips on the inside. Most of the area leading up to the cave ~~has~~ been cleared, some 2° growth remains.

Graham + Michelle spent a long, hot day trying to place our one bamboo rat live trap - which they eventually did. A brief, hard sun shower hit about 4:00pm - enough to make the trails a mess tomorrow,





Stem, BR  
1988

12 Aug. and to wet the corn kernels the cook had set out in the middle of the driveway to dry. Tonite, hopefully get tissues from the rest of the specimens - the bats + the rat.

13 Aug. Art prepared only one bat after dinner - leaving 2 bats + the rat for today. After breakfast we checked the nets at the cave - 5 live bats, one dead and out covered in the net in the "ceiling". Of the live ones, a Hipp. auringer, ~~3~~ Rhinolophus, a Pipistrellus. Tissueed all. ~~the~~ Went to area #2 to check bat net - nothing. Then went to check traps - again nothing, but pretty muddy. Got back before lunch + let Wu have it about the water. The Chinese tourists left after breakfast + w/ them so did Ho + elec. Amazing. Wu was quite indignant. I was so mad I skipped lunch. Plans changed after that as area #3 which we were to explore this aft. is only reachable by a 2hr. hike or boat ride. Art called their bluff on that one so after lunch we went back to area #2 + pulled all the traps so we could take them to area #3 in the morning. Too muddy + too few people - The undergrads don't have a lot of motivation and are sick a great deal. Miraculously, water appeared at the outdoor





Stein, BR  
1988

13 Aug. showers upon our return. Art mentioned this Chinese guest / the correlation to Patrick who was most indignant. But no water today - and no water tomorrow - it's Sunday!

Cleaned traps tonite - yek, then tissues. The word on the boat trip for tomorrow is there is no word right now. After dinner they said we couldn't get boats. That was charged to too much rain upstream, water too dangerous. Then there was the excuse of the wild elephants being dangerous. We should be so lucky to see an elephant. I don't know about upstream but we only had light sprinkles this afternoon in the way of rain. I can hardly wait for tomorrow.

14 Aug. Another cloudy A.M. Six of us were to go to area #3 of 1° forest. No boats, it was decided we would walk. Picked up our forestry guide, a 2° school student to help carry traps + the Director, Mr. Wei + Patrick went along for the fun. Started walking from the Dai village, through the cultivated fields + straight up the hillside like we've seen the villagers do. It was long, hot, steep and just a bit slick. A beautiful view from the top. You could look out + see how for miles + miles the forest had been cleared for agriculture. We hiked for about





Stein BR  
1988

14 Aug

an hour which got us to the edge of the primary forest. Passed through a bamboo "forest" briefly. Patrick went on about the dangers - wild elephants, tigers, the white buffalo, etc. Altho area #3 is the largest of the 3 preserves once again we were only allowed on the periphery. How frustrating. And we had dragged all those traps along w/ us. I set about 80 altho the habitat seemed much the same to me as in the other areas we had worked. Had we gone by boat I can only guess that we would have approached the reserve from the other side and the climb would have been just as arduous.

Got back about 3:00 pm. All the others had gone out to a new bat cave, along the river, about 10 km. further/past the 1st cave of yesterday. It began to pour around 4:00 pm - a hard, steady driving rain. We waited. The other returned about 6:30 w/ a net of bats, a veritable gold mine. Mostly 2 genera - Tadarida + Taphozous. Art started on the dead ones first, the live ones he'll save till tomorrow (but they may be dead by then). What he wasn't up to skinning, I got to pickle. I tissueed everything + here it is midnite. I think he got 5 others at





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14 Aug

Cave #1. The rain continued till just a short while ago. I can't begin to think what the hillside will be like tomorrow + the troops are fighting not to go.

Steve recovered one abandoned radio collar today - in a woodpile 10 min. walk from here. It may have been Sunday but we had water all day until 6:45pm but no electricity. Electricity went on about then, died once about 9:00pm + will probably creak any minute now.

15 Aug

Light rain this morning. <sup>Got</sup> up of the electricity and wrapped up some of the alcoholics to make room in the bucket for what we'll do today. After some discussion I was able to stay here and tissue specimens while Chris + Troy went back up to area #3. Steve, Michelle, + Graham went to area #2 to get what traps were left, then Eric + Michelle checked bat nets - just one <sup>fruit</sup> bat, <sup>Cynopterus</sup>. Chris + Troy took 2 nets to area #3 + came back w/ 4 "Rats" - 3 Rattus(?), 1 Niviventer. Rain let up late morning. Started to pack up study skins + we came by all excited - can't pack till tomorrow after the forestry service guy comes + checks our specimens - we must pay for them. The alcoholics technically don't exist. Just





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15 Aug

need to keep my frustrations in check for 2 more days.

4 Rats caught in high, rocky area where Graham set traps.

Tomb bats, Taphozous<sup>mus</sup>; have few if any ECTOs. Prepared all but the one Niviventer - Art footied and he feels it is special.

16 Aug.

I caught a rat! In the 2nd to last Victor in my line. Didn't get off till 9:30am. Started walking from the station. It took 1 1/2 hr. to get up to area #3. It was a whole lot easier w/o hauling a bag of traps. No sooner did we arrive than the rains started. Pulled all the traps + redistributed them among the 8 of us, then headed down again. Used my walking stick which really made a difference. Graham + I walked ahead and had a nice talk. Asked me if I'd be interested in coming back again, not necessarily ~~from~~ to China, but to SE Asia. We would put together our own group and do it right. He's funnier than I am but he is just as frustrated.

Art got about a dozen bats, new sp. maybe, now he thinks it's just a larger Hipposideros armingeri. Interesting how each cave or area, particularly the caves, have only one or 2 types of bats.

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